WISCONSIN DEPARTMENT OF HEALTH AND FAMILY SERVICES

DIVISION OF PUBLIC HEALTH
Oral Health Program
P. O. Box 2659
Madison, WI 53701-2659

Up-to-date information for the health care professional

DENTAL HEALTH FACT SHEET

FLUORIDE CONTENT OF BOTTLED, FILTERED AND CONDITIONED WATER

BOTTLED WATER

The widespread use of fluorides in various forms (water, milk, salt, dentifrices, gels, rinses, tablets, drops, etc.) is in large part responsible for the significant declines in tooth decay. It is particularly important for children to receive appropriate levels of dietary fluorides. For children drinking non-fluoridated water, dietary fluoride supplements are often indicated.

It Is Essential That The Fluoride Content Of The Patient's Drinking Water Be Determined Prior To Prescribing Fluoride Supplements.

For many children, bottled water is the main source of water consumption. This includes the use of bottled water for the preparation of formula, juices, etc. Most delivered domestic water and water obtained from stores contain insignificant amounts of fluoride. However, some brands do contain levels of fluoride that would affect the supplemental dosage schedule.

Bottled water may also be an option for children living in areas with high natural levels of fluoride in the water. High levels of natural fluoride (greater the 2.0 ppm or mg/l) result in an increased risk of fluorosis (mottled enamel) which can be an aesthetic problem. In areas with high levels of natural fluoride, bottled water should be consumed until the child is nine years of age.

BOTTLED WATER FLUORIDE LEVELS [1]

Bottled Water	Fluoride Level
Artesian Wells	< 0.1 mg/l *
Artesian Gold	< 0.1 mg/l
Bohrer Hugeia Mineral Water	< 0.1 mg/l **
Buffalo Don's	< 0.1 mg/l
Buffalo Don's Artesian Wells	0.22 mg/l
Buffalo Don's Infant Drinking	< 0.1 mg/l
Cassidys	0.215 mg/l
Chippewa Springs Distilled	< 0.1 mg/l
Chippewa Springs Spring Water	< 0.1 mg/l
Copps Corporation	< 0.1 mg/l
Coulee Springs	< 0.1 mg/l
Dominicks-Purity	< 0.1 mg/l
Green Bay 7 Up Bottled Water	1.3 mg/l
Green Bay 7 Up Deminer Water	< 0.1 mg/l
Harry Garlock	< 0.1 mg/l
Heilemans	< 0.1 mg/l
Jim & Judy's Foods Inc.	< 0.1 mg/l
John K. Bolger	< 0.1 mg/l
Kohler Company	< 0.1 mg/l
Kwik Trip	< 0.1 mg/l
Lefeveres	< 0.1 mg/l
Mid-State	< 0.1 mg/l
Mineral Springs	0.23 mg/l
Neenah Spring Artesian Water	< 0.1 mg/l
Nicolet Forest Artesian	< 0.1 mg/l
Purity Drinking Water	< 0.1 mg/l

* mg/l = ppm

** <0.1 mg/l is an insignificant amount

(continued)

Bottled Water	Fluoride Level
Schmitz	< 0.1 mg/l
Shultz's	1.03 mg/l
Shurefine	0.245 mg/l
Shureway Artesian	0.245 mg/l
Springtime	0.89 mg/l
Stodola Brothers	0.225 mg/l
Terry L. Footit	0.21 mg/l
Werbelows	< 0.1 mg/l
Western WI Water Cond. Inc.	< 0.1 mg/l

[1] Source: State of Wisconsin Bottled Drinking Water Sampling and Analysis Test Results. Wisconsin Department of Agriculture, Trade and Consumer Protection. June, 1993.

Bottled water not on this list can be tested for fluoride content.

FILTERED WATER

Many families utilize home water treatment devices such as filtration systems. Examples of filtration systems are:

1. Faucet water filter that attaches to the faucet and uses a small, replaceable activated carbon filter.
2. Cellulose fiber sediment filter in an under sink water filter housing.
3. Activated carbon filter on an under sink water filter housing.
4. Reverse osmosis under sink filter system that uses a combination of activated carbon filters, sediment filters, and a pressurized reverse osmosis membrane.
5. Distillation unit that operates by heat distillation of water.

Although each type of filtration system reduces fluoride content, the activated carbon filter (81% reduction), the reverse osmosis system (84% reduction), and the distillation unit (99% reduction) produce clinically significant reductions. Children drinking water filtered through these systems may not be receiving adequate dietary fluoride and may require dietary fluoride supplements.

CONDITIONED OR SOFTENED WATER

Water softening is the process of removing divalent cations, usually calcium or magnesium, from water. The "hardness" of water is due to the presence of calcium and magnesium salts. Hard waters are frequently unsuitable for many domestic purposes because of their soap-destroying power and tendency to cause unpleasant scums and stains. Therefore, it is often necessary to treat the water using water conditioners of softeners to remove or to alter the constituents for the water to be fit for the proposed use. Fluoride passes through these home water softeners with no significant change in fluoride concentration. Therefore, the fluoride concentration remains very close to the fluoride concentration of the water source.

Various sources of water can be tested for fluoride content.

Sample "kits" for testing may be obtained by sending $17.00 to:

State Laboratory of Hygiene
2601 Agriculture Drive
Madison, WI 53707-7996 ... or by calling 1-800-442-4618

Some county health departments also provide testing services. Results may be sent directly to the dentist or physician.

For additional information contact: Chief Dental Officer
Division of Public Health
P.O. Box 2659
Madison, WI 53701-2659 … or by calling (608) 266-5152

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